

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002762**Date Inspected:** 12-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

**Bay 3**

The Quality Assurance Inspector selected areas for radiographic testing on Bottom Plates BP-142-001-049 and BP-115-001-049.

**Side Plate SP-309-001**

The Quality Assurance Inspector observed ZPMC welding operator Li Meng Qian, welder identification number 0544602, performing in process tack welding of side plate SP-309-001. Quality Control Inspector Au Xu Xiangping was monitoring the welder. The welder was using the flux cored arc welding process to produce the tack weld in the flat position. The Quality Assurance Inspector witnessed the Quality Control Inspector measure the welding parameters at the welder's station and found the parameters to meet the minimum requirements of welding procedure specification WPS-B-T-2233-B-U2-F. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated infra-red temperature measuring device.

**Side Plate SP-363-001**

The Quality Assurance Inspector observed ZPMC welding operator Huan Xing Lang, performing in process tack welding of side plate SP-363-001. Quality Control Inspector Au Xu Xiangping was monitoring the welder. The welder was using the flux cored arc welding process to produce the tack weld in the flat position. The Quality

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Assurance Inspector witnessed the Quality Control Inspector measure the welding parameters at the welder's station and found the parameters to meet the minimum requirements of welding procedure specification WPS-B-T-2233-B-U2-F. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated infra-red temperature measuring device.

## Bay 4

The Quality Assurance Inspector observed ZPMC in the process of splicing various internal diaphragm plates. The Quality Assurance Inspector observed the diaphragm plates in various stages of fabrication from fit-up to in process welding.

## Diaphragm Flanges

The Quality Assurance Inspector observed 5 sets of diaphragm flanges in various stages of fabrication from fit-up to in process welding. The Quality Assurance Inspector performed a random inspection of the fit-up of one of the diaphragm flanges. ABF was notified of various discrepancies in the bevel preparation. Below are two digital photographs illustrating the discrepancies.



## Summary of Conversations:

As stated in the contents of the above report.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (916) 227-5719, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bertlesman,Greg	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer

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